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APPLICATION NO. FILING DATE		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/735,025 12/12/2		12/12/2003	Francisco Javier Alday Lesaga	593P012	2456	
42754	7590	03/15/2006		EXAMINER		
NIELDS &				PARSONS,	PARSONS, THOMAS H	
176 EAST N	MAIN ST	REET, SUITE 7				
WESTBORO, MA 01581				ART UNIT	PAPER NUMBER	
				1745	1745	

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	_			
	•	10/735,025	ALDAY LESAGA ET AL.				
	Office Action Summary	Examiner	Art Unit	_			
		Thomas H. Parsons	1745				
	The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address				
Period fo		LIC CET TO EVOIDE A MONTH!	C) OB THIRTY (20) B AVO				
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in the may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status	•						
1)⊠	Responsive to communication(s) filed on 12 De	ecember 2003.					
,							
.3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Dispositi	on of Claims						
	Claim(s) <u>1-26</u> is/are pending in the application.						
•	4a) Of the above claim(s) is/are withdraw	n from consideration.					
	Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>1-26</u> is/are rejected.						
7)	Claim(s) is/are objected to.	•	,				
8)[	Claim(s) are subject to restriction and/or	election requirement.	·				
Applicati	on Papers						
9)□.	The specification is objected to by the Examiner	•	V				
	The drawing(s) filed on <u>12 December 2003</u> is/ar		ed to by the Examiner.				
·	Applicant may not request that any objection to the c	· · · · · · · · · · · · · · · · · · ·	•				
	Replacement drawing sheet(s) including the correction						
11) 🔲	The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.				
Priority u	inder 35 U.S.C. § 119						
_	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
a)[	All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.						
	<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>						
	<ol> <li>Copies of the certified copies of the priori application from the International Bureau</li> </ol>	•	d in this National Stage				
* S	ee the attached detailed Office action for a list of		d.				
		,					
A44a-b-			•				
Attachment	(s) e of References Cited (PTO-892)	4) Interview Summary (	PTO 413)				
2) 🔲 Notice	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Dat	te				
	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date <u>03/05/2004</u> .	5)  Notice of Informal Pa	atent Application (PTO-152)				

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### **DETAILED ACTION**

#### **Drawings**

1. The drawings are objected to because

Figures 1 and 2, suggest changing "Voltaje" to --Voltage--, and "Tiempo" to --Discharge Time--.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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## Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1: It is unclear as to whether the cathode incorporates all or at least one of an inorganic crystalline additive of tungsten oxide, compounds of zirconium, titanium oxide with rutile structure, yttrium oxide, cerium oxide, zeolites and aluminosilicates. Claims 2-14 are rejected to as being dependent upon rejected claim 1.

Claim 15: It is unclear as to whether the cathode incorporates all or at least one of an inorganic crystalline additive of tungsten oxide, compounds of zirconium, titanium oxide with rutile structure, yttrium oxide, cerium oxide, zeolites and aluminosilicates. Claims 16-26 are rejected to as being dependent upon rejected claim 15.

Claim 9: It is unclear as to what is meant by the total anticipated proportion and the specified inorganic crystalline additives in lines 1-3 of the claims.

Claim 9 recites the limitation " the total anticipated proportion and the specified inorganic crystalline additives" in lines 1-3. There is insufficient antecedent basis for these limitations in the claim.

Claim 10: It is unclear as to what is meant by the mentioned inorganic crystalline additives in line 2 of the claim.

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Claim 10 recites the limitation " the mentioned inorganic crystalline additives " in line 2.

There is insufficient antecedent basis for this limitation in the claim.

Claim 11: It is unclear as to what is meant by the mentioned inorganic additives in line 2

of the claim.

Claim 11 recites the limitation " the mentioned inorganic additives " in line 2. There is

insufficient antecedent basis for this limitation in the claim.

Claim 23: It is unclear as to what is meant by the total anticipated proportion and the

specified inorganic crystalline additives in lines 2-4 of the claims.

Claim 23 recites the limitation " the total anticipated proportion and the specified

inorganic crystalline additives" in lines 2-4. There is insufficient antecedent basis for these

limitations in the claim.

Claim 24: It is unclear as to what is meant by the mentioned inorganic crystalline

additives in lines 2-3 of the claim.

Claim 24 recites the limitation " the mentioned inorganic crystalline additives " in lines

2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim Objections

4. Claim 15 is objected to under 37 CFR 1.75(c), as being of improper dependent form for

failing to further limit the subject matter of a previous claim. Applicant is required to cancel the

claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the

claim(s) in independent form.

Claim 15 recites "A cathode ... according to the first claim, further characterized in that it is a cathode composed of manganese dioxide and it incorporates an inorganic crystalline additive of tungsten oxide, compounds of zirconium, titanium oxide with rutile structure, yttrium oxide, cerium oxide, zeolites and aluminosilicates, and in that at least one of these additives is present in a proportion or range between one ten thousandth (0.0001) and ten (10) percent by weight of the cathode mass. Claim 15 recites the same cathode as that recited in claim 1, and therefore is not further limiting the cathode of claim 1.

5. Claims 16-25 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claims should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

# Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1, 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. (5,532,085).

Claim 1: The claim has been interpreted as an electrochemical element or cell, characterized in that it contains an anode, a separator, and a cathode composed of manganese dioxide, in that this cathode incorporates at least one of an inorganic crystalline additive of tungsten oxide, compounds of zirconium, titanium oxide with rutile structure, yttrium oxide,

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cerium oxide, zeolites and aluminosilicates, and at least one of these is present in a proportion or range between one ten thousandth (0.0001) and ten (10) percent by weight of the cathode mass.

Accordingly, Davis et al. disclose an electrochemical cell, characterized in that it contains an anode, a separator, and a cathode composed of manganese dioxide, in that this cathode incorporates an inorganic crystalline additive of tungsten oxide, and is present in a proportion or range between one ten thousandth (0.0001) and ten (10) percent by weight of the cathode mass (abstract, and col. 1: 5-31 and 46-57).

Because Davis et al. disclose a tungsten oxide that is chemically similar to that which is instantly disclosed, it obviously would provide an inorganic crystalline additive.

Claim 9: Davis et al. disclose that the total proportion of inorganic crystalline additive in the cathode is made up an inorganic crystalline additives (i.e. a tungsten oxide) (abstract, and col. 1: 5-31 and 46-57).

Claim 10: The recitation "may contain" in line 2 has been construed as a limitation that does not positively recite water of crystallization contained in the crystalline additive. However, because Davis et al. disclose a tungsten oxide that is chemically similar to that which is instantly disclosed, it obviously would provide an inorganic crystalline additive may contain water of crystallization.

Claim 11: The recitation "may contain" in line 2 has been construed as a limitation that does not positively recite foreign ions contained in the inorganic additive. However, because Davis et al. disclose a tungsten oxide that is chemically similar to that which is instantly disclosed, it obviously would provide an inorganic crystalline additive that may contain foreign ions.

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Claim 12: Davis et al. disclose that the cell is alkaline (abstract, and col. 1: 5-31 and 46-57).

Claim 13: Davis et al. disclose that the anode includes zinc particles (col. 1: 5-31 and 46-57).

Claim 14: Davis et al. disclose that the cell contains a solution of electrolyte (aqueous KOH) (col. 1: 5-31).

Claim 15: The claim has been interpreted as a cathode incorporates at least one of an inorganic crystalline additive of tungsten oxide, compounds of zirconium, titanium oxide with rutile structure, yttrium oxide, cerium oxide, zeolites and aluminosilicates, and at least one of these is present in a proportion or range between one ten thousandth (0.0001) and ten (10) percent by weight of the cathode mass.

Accordingly, Davis et al. disclose a cathode composed of manganese dioxide, in that this cathode incorporates an inorganic crystalline additive of tungsten oxide, and is present in a proportion or range between one ten thousandth (0.0001) and ten (10) percent by weight of the cathode mass (abstract, and col. 1: 5-31 and 46-57).

Because Davis et al. disclose a tungsten oxide that is chemically similar to that which is instantly disclosed, it obviously would provide an inorganic crystalline additive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas H. Parsons whose telephone number is (571) 272-1290. The examiner can normally be reached on M-F (7:00-4:30) First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER

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